

Docket No. AUS990939US1

**CLAIMS:**

5 What is claimed is:

1. A logically partitioned data processing system,  
comprising:

10 a plurality of operating systems, each assigned to a  
separate one of a plurality of logical partitions;

a hypervisor for creating and enforcing separation  
between each of the plurality of logical partitions;  
wherein

15 the hypervisor includes a plurality of functions  
sets, each function set including a list of functions  
which may be called by any one of the plurality of  
operating systems to perform a task while maintaining  
separation between each of the plurality of logical  
partitions,

20 the hypervisor informs each of the plurality of  
operating systems of an enabled function set, wherein  
functions identified within the enabled function set are  
enabled for use by each of the plurality of operating  
systems and functions not identified within the enabled  
25 function set are disabled for use by each of the  
plurality of operating systems.

2. The logically partitioned data processing system as  
recited in claim 1, wherein the enabled function set from  
30 the plurality of function sets may be changed such that a  
different one of the plurality of function sets becomes

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Docket No. AUS990939US1

the enabled function set.

3. The logically partitioned data processing system as recited in claim 1, wherein additional function sets may  
5 be added to the plurality of function sets as additional functions are added to the plurality of functions provided by the hypervisor.

4. The logically partitioned data processing system as  
10 recited in claim 1, wherein the hypervisor is implemented as firmware.

5. The logically partitioned data processing system as recited in claim 1, wherein each of the plurality of  
15 function sets comprises a different group of the plurality of functions.

6. The logically partitioned data processing system as recited in claim 1, wherein optional functions are  
20 omitted from at least one of the plurality of function sets.

7. A method of configuring a set of services provided by a hypervisor to a logically partitioned data  
25 processing system, the method comprising:

presenting a user with a set of service options, wherein the set of service options correspond to services performed by the hypervisor for each of multiple operating systems within the logically partitioned data  
30 processing system such that processes performed by one of the multiple operating systems do not interfere with

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processes performed by others of the multiple operating systems;

responsive to selection of a particular service option, storing the selected service option and presenting the service option to an operating system image as the operating system image is initialized.

8. The method as recited in claim 7, further comprising:

responsive to loading a new version of the hypervisor, wherein the new version of the hypervisor contains additional services, reporting the additional services to each operating system upon re-initialization.

9. The method as recited in claim 7, wherein the operating system image is initialized by booting.

10. The method as recited in claim 8, wherein the re-initialization of each operating system is performed by a reboot.

11. The method as recited in claim 7, wherein the hypervisor is implemented as firmware.

12. The method as recited in claim 7, wherein the set of services comprise a table of function sets and each of the function sets, upon selection, enables a subset of functions, provided by the hypervisor, for use by each of the multiple operating systems.

13. A computer program product in a computer readable

Docket No. AUS990939US1

media for use in a data processing system for configuring a set of services provided by a hypervisor to a logically partitioned data processing system, the computer program product comprising:

5 first instructions for presenting a user with a set of service options, wherein the set of service options correspond to services performed by the hypervisor for each of multiple operating systems within the logically partitioned data processing system such that processes  
10 performed by one of the multiple operating systems do not interfere with processes performed by others of the multiple operating systems; and

second instructions, responsive to selection of a particular service option, for storing the selected  
15 service option and presenting the service option to an operating system image as the operating system image is initialized.

14. The computer program product as recited in claim 13,  
20 further comprising:

third instructions, responsive to loading a new version of the hypervisor, wherein the new version of the hypervisor contains additional services, for reporting the additional services to each operating system upon  
25 re-initialization.

15. The computer program product as recited in claim 13, wherein the operating system image is initialized by booting.

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16. The computer program product as recited in claim 14,

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Docket No. AUS990939US1

wherein the re-initialization of each operating system is performed by a reboot.

17. The computer program product as recited in claim 13,  
5 wherein the hypervisor is implemented as firmware.

18. The computer program product as recited in claim 13,  
wherein the set of services comprise a table of function  
sets and each of the function sets, upon selection,  
10 enables a subset of functions, provided by the  
hypervisor, for use by each of the multiple operating  
systems.

19. A system for configuring a set of services provided  
15 by a hypervisor to a logically partitioned data  
processing system, the system comprising:

first means for presenting a user with a set of  
service options, wherein the set of service options  
correspond to services performed by the hypervisor for  
20 each of multiple operating systems within the logically  
partitioned data processing system such that processes  
performed by one of the multiple operating systems do not  
interfere with processes performed by others of the  
multiple operating systems; and

25 second means, responsive to selection of a  
particular service option, for storing the selected  
service option and presenting the service option to an  
operating system image as the operating system image is  
initialized.

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20. The system as recited in claim 19, further

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comprising:

5 additional services to each operating system upon  
re-initialization.

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by a reboot.

15 23. The system as recited in claim 19, wherein the  
hypervisor is implemented as firmware.

24. The system as recited in claim 19, wherein the set of services comprise a table of function sets and each of the function sets, upon selection, enables a subset of functions, provided by the hypervisor, for use by each of the multiple operating systems.